

DOCUMENT RESUME

ED 211 659

UD 022 087

AUTHOR Dean, Joenathan
 TITLE Dealing with Decline: The Politics of Public School Closings. ERIC/CUE Urban Diversity Series, Number 77.
 INSTITUTION ERIC Clearinghouse on Urban Education, New York, N.Y.
 SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
 PUB DATE Sep 81
 CONTRACT 400-77-0071
 NOTE 29p.
 AVAILABLE FROM ERIC Clearinghouse on Urban Education, Box 40, Teachers College, Columbia University, New York, NY 10027 (\$5.00).
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Accountability; Administrator Role; *Board of Education Role; *Citizen Participation; Consolidated Schools; Decision Making; *Declining Enrollment; Desegregation Methods; Elementary Secondary Education; *Policy Formation; *Politics; Residential Patterns; *School Closing; School Community Relationship; School Demography; School Maintenance

ABSTRACT

This paper examines the politics of public school closings and suggests strategies for effective management of school closings by administrators. Issues which are covered include: (1) the effects of public school closings on students, teachers, parents, and the community; (2) the trend of declining enrollment; (3) management approaches to closings which include demographic, maintenance, desegregation, and neighborhood considerations; (4) citizen participation; (5) rural consolidations; and (6) urban school closings with regard to desegregation and neighborhood impact. The paper concludes with a section on effects which need further investigation, and calls for anticipatory planning on the part of local, State, and Federal agencies. (M1)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED211659

ERIC/CUE URBAN DIVERSITY SERIES
Number 77, September 1981

**DEALING WITH DECLINE:
THE POLITICS OF
PUBLIC SCHOOL CLOSINGS**

by

Joenathan Dean, Ph.D.

Department of Political Science
and Department of Urban Affairs

Hunter College

City University of New York

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



CLEARINGHOUSE ON URBAN EDUCATION

Institute for Urban and Minority Education
Teachers College, Columbia University
New York, New York 10027

WD 022 087

This publication is one in the ERIC/CUE Urban Diversity Series produced by the ERIC Clearinghouse on Urban Education under contract between the National Institute of Education, United States Department of Education and Teachers College, Columbia University. Additional copies will be available from:

ERIC Document Reproduction Service
P.O. Box 190
Arlington, Virginia 22210

Its ED identification number and full ordering instructions will be found in *Resources in Education*, the monthly ERIC abstract journal, or can be obtained by writing ERIC/CUE.

Copies are available from the ERIC Clearinghouse on Urban Education, Box 40, Teachers College, Columbia University, New York, New York 10027, for \$5.00 each.

This publication was prepared with funding from the National Institute of Education, U.S. Department of Education, under contract number 400-77-0071. The opinions expressed in this publication do not necessarily reflect the positions or policies of NIE or the Department of Education.

The National
Institute of
Education
U.S. Department
of Education
Washington, D.C. 20208



TABLE OF CONTENTS

I. Introduction	1
II. School Closings: A Political Issue	1
III. Declining Enrollments	2
IV. Managing School Closings	4
"About the Only Thing Left to Manage is Conflict"	
General Management Approaches to School Closings	
How to Close a School: The Numbers and the Process	
Rationalizing Decision-Making in School Closings	
V. School Closings: An Opportunity for Citizen Participation	11
VI. Lessons to be Learned from Previous School Closings:	
Rural Consolidation	11
VII. Enrollment Decline and School Closings in Large Cities ..	12
School Closings and Desegregation	
The Neighborhood Impact of School Closings	
VIII. Conclusion: The Effects of School Closings	
that Need Investigation	16
References	20

I. Introduction

Since 1971-1972, public school enrollment in the United States has been declining. School districts that once struggled to cope with overcrowding, double sessions, temporary facilities, and new construction, now face new headaches caused by the pressures of declining enrollments and declining funds. Although the growing consensus seems to be that there is a need to close schools, there still exists considerable disagreement about which schools to close and when.

The purpose of this paper is (a) to show that the issue of school closings is essentially a political one, and (b) to establish the "state of the art" of selected aspects of the topic, in the spirit of the saying attributed to Lincoln: "If we could first know where we are and whither we are tending, then we could better judge what to do and how to do it."

II. School Closings: A Political Issue

In a school closing dispute in Rosedale (Queens) New York, the parents of children being transferred because of the closure indicated that they felt abused (Schmemmann 2/6/81: B1 and B3) because it was their apparent perception that the school to which their children were being transferred was unsafe and academically inferior. Public officials argued that this was untrue. Nevertheless, the residents viewed the closing as "a fatal assault on their neighborhood and way of life, and they reacted quickly and angrily" (Schmemmann 2/6/81: B3) with a boycott of the other school. Although the boycott was unsuccessful, it nevertheless pointed up the fact that shrinking enrollment, and in particular school closings, is one of the most politically visible and divisive public issues since school desegregation or school decentralization (Cuban 1979: 367). Any attempt, then, to approach school closings as simply an administrative task is *mista'en*. For a public school, like a post office, fire house, or military base, is a government facility, and those whom it was set up to serve expect to have some say in its disposition.

As the Rosedale case illustrates so well, community residents feel intensely threatened when their neighborhood school is designated to be closed, especially when they have developed close ties with the school, and when they have based important decisions on the continued availability of education programs within the neighborhood school (Stefonek 1979:8). And the opposition by those most affected by school closures is not lessened simply because of the legality of such actions, especially when schools are closed without their consent.

Faust (1976:20) points out that experience with school closings seems to demonstrate that the "rational" decision factors (school building capacity, age, fuel consumption, etc.) are not adequate when used by

themselves to support decisions to close schools. According to Faust (1976: 25), each attempt to close a public school in Cincinnati because of enrollment decline has been met with considerable opposition from the local community, which bases its opposition on a different set of considerations than those utilized by the school board to determine that a school ought to be closed. The experience in Cincinnati is in no way unique.

The management of decline then is not "simply" a "technical" problem (i.e. where managers are able to control the relationship between ends and means). It is much more of a "political" problem. This fact by no means serves to denigrate the expertise that managers do have; rather it indicates that the social ends to be achieved have not been clearly identified or agreed upon. And as Rogers argues, the assumption that presumably "technical" educational decisions are apolitical is anyway unfounded since all administrative decisions are based on assumptions of value, involve priorities, and involve conceptions of alternative costs. School officials operate in what students of administration call "zones of acceptance" or "conceptions of legitimacy." Any plans they make for changes in the school system, like school closings, are affected by the actions and attitudes of many "constituencies," from professional groups inside the school system to community groups, real estate interests and so on. Thus, says Rogers:

An explanation of public education decisions such as we're doing what is educationally right and that's the only consideration fails to describe how such decisions are made. Though such statements may be necessary for public relations purposes, they obviously cannot be used as substitutes for political realities. (Rogers 1968:5)

And as Iar naccone (1979: 420 and 421) points out:

The declining enrollment problem is a political conflict management one, a policy process problem, not a traditional organizational specialist area even though it requires specialized technical inputs. The sequence of first technical and then political inputs will not work if the actors involved become wedded to the implied technical solutions even though they subsequently go through the charade of receiving political inputs. This may be a particularly difficult lesson to learn for technically well-trained educational professional managers unaccustomed to the management of *public* political conflict.

III. Declining Enrollments

School districts throughout the U.S. have for many years suffered with the problems that accompany school closings. These problems have become more frequent and intense as school districts have decreased in number, the public has become more involved in schools, and, most recently, enrollments have begun to fall rather sharply. In 1932, there were over 125,000 school districts in the U.S. (American Association of

School Administrators, 1965) IN 1953, the number had decreased to about 55,000, and by 1972, to fewer than 17,000 (Mullins 1973: 23-26,57). And this movement toward consolidation has involved the closing of a number of school facilities, especially one-room schools. Frequently these closings have entailed social and political controversy. More recent school closings have caused the clamor to increase as declining enrollments have affected larger districts and greater numbers of people (Faust 1976:34).

Total school enrollment in the United States peaked in 1970-71 at 51.3 million pupils. Enrollment in nonpublic schools peaked in the mid-1960s (National Center for Education Statistics 1978:18). Since 1971-72, public school enrollment has been declining at a rate of 8 percent and nonpublic school enrollment at a rate of 2 percent. And in terms of distinctions between elementary and secondary public schools, enrollment peaked during the 1971-72 school year at the elementary level, whereas enrollment at the secondary level peaked during the 1975-76 school year (McPherrin 1979:7 and 8). And although enrollment decline has affected nearly every school system throughout the country, it is generally greatest in inner-city schools and least in suburban schools (Faust 1976:11 and McPherrin 1979:10).

Declining school enrollments or at the very least stabilizing enrollments have been brought about by a number of factors: the end of the "baby-boom" generation of students, the women's liberation movement, improved methods and greater utilization of contraception, the postponement of marriage, postponement of childbearing after marriage, smaller families, the generally bleak economic output (Fredrickson 1978:2), young middle-class flight to suburbia's outer areas, and localized within-and-between district migration. All of these factors have combined to bring about a pronounced national trend toward enrollment decline in public schools and, in some school districts, a "crisis of decline" (Berman and McLaughlin 1977:1).

Despite the obvious importance of decline, there is still remarkably little systematic knowledge available about "the dynamics and political and organizational impacts" of enrollment declines and school closings (Boyd 1979:334). In the small amount that has been done, the one theme that emerges with regards to understanding the response by school districts to decline is that:

There is a tendency to view declining enrollment as a state or national phenomenon. For school districts, it is not. *Enrollment is a local phenomenon, in each district a unique configuration of birth rate, population migration, age of community, and other factors* (Florio 1976 2, emphasis added)

Of these "other factors," those related to the fiscal situation of a district are especially important to local decision makers. For one thing declining enrollments hurt districts financially because a state's share of public education funding is usually tied to average daily attendance figures and

furthermore there are usually unavoidable lags in districts being able to adjust to classroom staffing arrangements (Boyd 1979:334 and National School Boards Association 1976:5). Both these constraints drive up operating costs, aggravating further the fiscal pressures on districts.

Enrollment decline, however, is only part of the broader problem of how school districts adjust to a period of contraction after a decade or two (the 1950s and the 1960s) of extraordinary growth (McPherrin 1979:1). Berman and McLaughlin (1977:1) argue that the effectiveness of schools in an era of retrenchment depends only partly on the magnitude of enrollment decline; the critical factor, they claim, is the way in which school districts respond to a changed reality. What is important is how they *manage* decline

IV. Managing School Closings

"About the Only Thing Left to Manage is Conflict"

The changeover from growth to decline in school districts has created unfamiliar and difficult problems for educational decision makers. An expanding budget and slack resources with which to buy off conflict have vanished in most school districts (Boyd 1979:334). As a result, the importance of the conflict management function of government has increased. In fact, argues Boyd (1979:282) today about the only thing left for local school districts to manage is conflict. Because of increasing centralization of authority over educational policy due to state accountability schemes and competency tests (for students and staff) and because of the national teachers' union movement imposing contractual constraints, the ability of a local school district to manage its affairs has diminished considerably.

Complicating the situation, argue Mark and Anderson (1979:174) is the fact that, just as people and households progress through a life cycle of inception, youth, and maturity, so do school districts. And school district characteristics vary systematically with their stage in the life cycle. That is, in younger districts, where enrollments are increasing, costs are generally lower and the teaching force younger. In districts in the middle stages of their life cycle, there is a tendency for enrollments to be stable. And the latter stages are characterized by declining enrollments and increasing costs. Whereas young districts often have insufficient capacity, mature districts tend to have excess capacity.

And finally, Boyd (1979:282) argues that the community aging process, which influences conflicts over community service levels and taxation, is complicated and aggravated by the following.

1. cosmopolitan curriculum reforms
 - a. sex education
 - b. bilingual-bicultural education

- c. the "new" biology
- d. the "new" social studies
- 2. expensive mandated educational reforms
 - a. special education
 - b. equal access for the handicapped

All of which place even greater strain upon local fiscal resources.

Unfortunately for those having to deal with the problems associated with decline, because of the relative newness of decline, the process and implications of organizational contraction have not been adequately studied. Instances of decline in public organizations have not been frequent enough to stimulate systematic analysis of the consequences. For the last 40 years or so have been characterized by unprecedented growth in the public sector as a whole (Choy 1979:1). And until recently, declining organizations have been anomalous and their problems consequently were not deemed relevant for most organizations (Levine 1978:316).

Falling enrollments and dwindling revenues have forced school administrators to recognize that decline is no longer necessarily a sign of managerial failure. Glassberg (1978:329), in fact, suggests that managers may enhance their reputations by implementing cutbacks as well as by administering over growth. As Thomas sees it (1980:21): "a school closing carries with it the hope that educational opportunities can be improved in the midst of conflict, confrontation, and consolidation." Cuban (1979:392) argues that although there is no need to make virtue out of necessity, there is a need to suspend beliefs that retrenchment is totally unpleasant. It provides an opportunity for review and re-evaluation of present programs and facilities as well as for serious long-range planning for the future. And the major objective of educational planning must be the improvement of the educational service provided.

There have been very few studies which employ experimental or quasi-experimental designs to explore the relationships between declining enrollments and factors such as: fiscal solvency, organizational morale, and student performance. Along with the relative newness of the problem of organizational decline, the difficulties in posing testable hypotheses have prevented systematic and comprehensive studies from focusing on the actions, causes, and consequences of declining enrollment in specific school districts (McPherrin 1979:2). The first obvious result of enrollment decline, argues Neill (1976:443), is a reduction in class size. In fact, James (1977:176) notes that the ratio of professional to pupils in American schools dropped almost one-third from 1955 to 1975 (a ratio of 1 to 30 in 1955 to a ratio of 1 to 20.4 in 1975). McPherrin (1979:18 and 19) suggests that the effects of declining enrollment on school districts include the following conditions: reductions in class size, staff, and programs; impairment of human relations; recycling of school property; development of negative public attitudes toward referenda; and numerous financial problems. All of these problems have to be managed.

General Management Approaches to School Closings

For school officials faced with the task of closing schools, the job seems to be one of building a case strong enough to overcome sentimental attachments to favorite schools and of soothing parents of children attending schools that are scheduled to be closed. The only way administrators can carry out this painful chore, while avoiding major problems—emotional and political—is for them to develop a precise set of criteria for determining which schools to close and making the public aware of these criteria. Basically, there is a need to document costs, trace population shifts, and indicate building inadequacies (Gordon and Hughes 1980:31). Gordon and Hughes suggest that school administrators consider the following criteria before closing schools:

- age of buildings
- capacity
- enrollment
- rate of population decline
- maintenance costs per student
- energy costs per student
- change in the nature of the area served by the school
- conversion/recycling potential
- racial balance

Thomas (1980:21) indicates that the problems associated with school closures are not educational, but rather they are human. He has come to the following conclusions about closing schools:

1. Job security is the paramount concern of school employees.
2. The welfare of children is the most important concern of parents.
3. The improvement of the quality of education is the most powerful way of obtaining public support for closing schools.

Thomas (1980:22) argues that the following leadership qualities are necessary for effective school closures:

1. Ability to listen;
2. Ability to synthesize;
3. Ability to tolerate ambivalence;
4. Ability to be decisive when faced with difficult decisions;
5. Ability to remain positive despite conflict and confrontation;
6. Ability to be open, trusting, and accepting of those who oppose school closings.

He claims also that more importance should be attached to questions of justice, fairness, and equity than to bread-and-butter items, such as cost, transportation, and buildings.

Communities are jealous of one another. That is, they feel they are competing with one another. And why should parents (who send their children to a school in a system with a multi-million budget) feel that they have to make a sacrifice of *their* school so someone else's children can have a better education (Faust 1976:153)? These parents must see

some gain in closing a school for their children. Moreover, the approach to people must not be a dispassionate one since the closing of a school is an emotional issue rather than a statistical one, and needs a strong human touch. Faust (1976:155) also argues that there is a need for strong community involvement at an early stage in the decision-making process.

Because students, parents, teachers, school board members, administrators, and in some instances community residents who are not parents (for instance alumni), are very concerned when reductions must be made, the Illinois Task Force on Declining Enrollment has stressed the importance of community involvement in planning responses to declining enrollment (Illinois Office of Education 1975: 32 and 33 and American Association of School Administrators 1974: 25 and 26). The Task Force also recommends continued communication by school decision-makers with all segments of the school community as responses are made to declining enrollment.

Bishop (1979: 290 and 291) indicates that some districts faced with the problem of enrollment declines have employed one or more of the following strategies of managing the community dynamics and the political fervor created in school closings:

1. unilateral board decision (closed system approach);
2. chief school administrator's decision;
3. role of the consultant or consultant teams;
4. role of an advisory committee (citizen and/or professional staff);
5. a community task force (open system approach).

In summary, the general decision-making techniques for dealing with enrollment decline extend from little or no public or community participation to considerable participation.

How to Close a School: The Numbers and the Process

Each community, argue Sargent and Handy (1974:39), responds to shrinkage dependent upon its individual character—"its styles of communication, of decision-making, of public action." They also argue that each community, however different, should work from a premise that any plan, and they maintain there must be a plan, should include ways of improving or at least maintaining the quality of service the public education system delivers. Moreover, Sargent and Handy (1974:39) suggest that a "plan for planning" must include:

1. A set of agreed-on goals, with specific objectives spelled out for each.
2. A factual base defining the "givens" of the plan for facility use, this base to include enrollments and their projections; schools, their location, capacity, and general level of adequacy; community changes affecting the location of people and the composition of their groupings; and a picture of the physical structure of the

district. Cost data on a new construction and/or renovation may also be required.

3. An analysis of the factual data. This is an exercise in fitting the numbers—pupils and schools—together, and of arranging them in their physical setting.
4. A set of possible solutions: alternative grade organizations, patterns of school use, abandonment for outmoded and/or unsafe schools, needed new construction or closings (or both).
5. A choice among alternatives for a preferred course of action; a justification for the alternative selected; the preparation of the time sequence for the actions to be taken; a cost analysis of the implications of the selected plan as against alternative options.

The reason for so detailed a plan is that with such an emotionally laden problem as school closure it is absolutely necessary to base a closure decision on a well thought out factual analysis. Sargent and Handy (1974:39) claim that communities with a plan (both a "plan for planning" school closings and a plan for school closings) are "noticeably" more successful in closing schools and they point to some examples.

The process of closing a school involves more than logistics and costs, maintain Sargent and Handy (1974:45). For them school closure is a political issue which requires that school policy makers approach closure as a two-step process. The first step is to present numbers on enrollment decline for the district as a whole. And only after these have been "assimilated, digested, and accepted" should talk take place about the specific implications decline may have for closure—especially for a particular school. The second general rule stated by Sargent and Handy (1974:46) is that school officials should share the problem.

As for how to determine which school to close, Wholeben (1980:8-12) has developed some guidelines which include seven elements:

1. Understand the problem.
2. Formulate a plan (i.e. a "plan for planning"):
 - a. Involve both school representatives and community residents.
 - b. Convene specific-function committees, set time frame for results, and allow full visibility to the public.
 - c. Utilize the media for dissemination purposes.
 - d. Set and meet all deadlines.
 - e. Release reports before site evaluation.
3. Structure the evaluation.
 - a. Define specific criteria to compare various agreed-upon site characteristics (enrollment, energy consumption, distance between neighboring schools, age of building, demographics of neighborhood, etc.).
 - b. Choose an evaluation strategy which will give the type of conclusions that are required.
4. Check the results.
5. Issue the report:

- a. State sites targeted, rationale for selection, and summarize positive effects.
- b. Develop a written summary of the elements one through four as described above. Survey procedures used, impact of decisions, recommendations received, and definite time-line for implementing recommendations.
- c. Define, discuss, and examine all data-related procedures, evaluation methods, and simulation process.
- d. Append all interim committee reports, memoranda, data summary tables, etc.
- e. Distribute copies of the report to schools, city hall, libraries, etc. to maximize the exposure to the public.
6. Execute the recommendations.
7. Initiate the follow-up study.

Various other writers have commented on the information and the procedures required to successfully close public schools. For example, Peckenpaugh (1977:20-30) and Thomas (1980:21-26) have written on the role of the administrator in school closures. Savitt (1977:31-34) has discussed the utilization of surplus school buildings. Wachtel (1979:161-190) describes how citizens can actively take part in school closings. The American Association of School Administrators (1974) has described a three-year timetable to prepare for school closings. The Association also indicates what steps to take regarding pupil prediction, operation and facilities, community and personnel, municipal officials, and the media. Finally, the Association suggests criteria for selecting a school to be closed (geographic location, academic excellence, present/capacity enrollment, facility condition, and re-cycle ability). Eisenberger (1974: 33-36 and 1975: 42-45) discusses ways to prepare the public for the closing of a neighborhood school. Most discussions (Pack and Weiss 1975 and Merlo 1971) dealing with school closing, however, focus heavily on the utilization or reutilization of the physical plant (Faust 1976:38). And while a great deal has been said about school buildings this does not deny the importance of the environmental and organizational context of enrollment decline or of the need to instill more rationality in the school closure process.

Rationalizing Decision-Making in School Closings

Champaign, Illinois in the early 1970's was confronted by the problem of what to do about declining enrollment as well as declining revenues. As in many school districts throughout the country, the school board, after considerable study and debate, decided to close some schools. In order to assist school board members in evaluating the consequences of closing different schools a computer simulation of school closings was developed (Yeager 1979:296).

Since many school districts ultimately have to close more than one

school, Yeager (1979:298) argues that it is better to study the interrelated effects of closings rather than make each decision in isolation. According to Yeager (1979:300) the computer simulation developed in Champaign was unique since it was designed to show the effects of closing more than one school at a time. The simulation allowed users to choose any combination of school closings and see what impact that combination had upon the school board's criteria for deciding which schools to close.

The criteria were divided into three categories (Yeager 1979:299):

1. Convenience: minimization of the discomfort of sending students to a new school:
 - a. Minimization of students' average walking distance;
 - b. Minimization of the number of students bussed;
 - c. Reduction of traffic hazard by keeping the number of busy streets students have to cross to a minimum;
2. Geography: minimization of the impact of school closings upon the community:
 - a. Schools should be kept open where most students walk to school;
 - b. Maintenance of integration program ;
 - c. Examination of the potential of the area around the school for expansion of school-age populations;
 - d. Examination of zoning laws to see if an area might change;
3. Facilities: closure of the buildings in most need of repair and least able to be adapted for future needs:
 - a. Examination of enrollments and capacities for schools that would remain open;
 - b. Examination of the size, age, and physical condition of the building.

The key to the simulation, maintains Yeager (1979:301) was the ability to represent the location of each student in relation to the locations of all the schools.

The simulation output consisted of maps, graphs, and tables which could be used to interpret the processed data in a number of different ways. Yeager (1979:304) describes the outputs which were most effectively used in Champaign.

Computer simulations are merely tools which can be used by school policy makers to make their decisions about school closings in response to enrollment decline. The simulation utilizes criteria established by policy makers to determine what type of schools to close. The simulation describes the impacts which result from closing each school. The criteria for school closings are based on values. Policy makers could, for instance, decide that a top priority in school closure-decision is to maintain schools in older areas to promote revitalization of those areas. The computer simulation is used then to help clarify the issues in school closure decisions.

V. School Closings: An Opportunity For Citizen Participation

Wachtel (1979:163) maintains that the closing of schools provides an opportunity for citizens to participate effectively in matters directly affecting their lives. Moreover, right-to-information and open meeting laws make participation possible in spite of resistance. Since dwindling enrollment and declining resources force communities to make cutbacks in valued areas of education, it is not surprising that citizens want to take part in developing priorities and making choices about what will be maintained, reallocated, or eliminated. These choices affect their children's lives, as well as the stability and identity of their community (Wachtel 1979:161).

A crucial issue then for citizens is how can a period of retrenchment become an opportunity for constructive change? In response, Wachtel discusses ways that citizens can participate and describes what tools and information participants will need to understand and address the problems presented by retrenchment. Wachtel (1979:163) indicates that there are four basic structures through which citizens can participate in planning for enrollment decline: councils, special task forces, district-wide groups, and neighborhood groups. These structures can be characterized according to the group's beginnings, focus, permanency, and representativeness.

Wachtel (1979:172) demonstrates how knowledge of individual neighborhoods possessed by citizens is especially valuable since it provides a fuller understanding of both the significance of a school to a neighborhood and the possible impact of relocating students and changing school boundaries.

Communities can accept decisions to close their school if they are convinced it benefits their children, if they have been involved in the decision process, and if they understand the issues involved in enrollment decline. Finally, Wachtel (1979:190) suggests that citizens should try to build a continuing yearly review of their schools with special attention devoted to accommodations made to declining enrollment. Fortunately, there is considerable experience with school closings in this country, that is if lessons are taken from previous school consolidations in small rural communities.

VI. Lessons to be Learned from Previous School Closings: Rural Consolidation

In a 1973 article Mullins indicated that the odds of school district consolidation were 2 to 1. And, typically, improving educational facilities and the programs they house has been the major purpose of consolidation. According to Faust (1976:40): "Examples of consolidation for

general program improvement are almost innumerable." As a result, there have been numerous studies of school district organization to facilitate educational improvement (*School Management* 1969:71-78, Purdy 1968, Bell 1967, California Commission on School District Organization 1964, The State University of New York 1962, University of Minnesota 1968, National Committee for the Support of the Public School 1967, Deeb 1967, Fitzwater 1953, Hooker and Mueller 1969, De Good 1968 to name only a few of these studies). According to Burlingame (1979:313-14), the values involved in such closings are not new ones. Those in favor of consolidation do believe that small schools are not only economically inefficient but also offer inferior educational opportunities to their students. Those opposed to consolidation view mandated equalities as infringements on personal freedom as well as hazards to stability and continuity.

The American Association of School Administrators (1974) suggests that in general opposition to school consolidation is related to a number of fears:

- Local control will be destroyed.
- The school plant will be taken out of the neighborhood and the children transported too far away from home.
- Vested interests, personal and financial, will be terminated.
- Parental influence on the children will be weakened seriously.
- School taxes will increase.
- The level of services will decrease.
- The close relationship between home and school, which has been maintained in the smaller unit, will be destroyed.
- The community itself will be seriously weakened or destroyed.

Anrig (1963:161-164) provides a list of sociological factors influencing resistance to consolidation, which is similar to the fears listed above: custom, size of the merger, community composition, socio-economic structure, inter-community rivalry, provincialism, school patronage, public involvement, and vested interests. A detailed discussion of the social needs that follow from school district consolidation is provided by the American Association of School Administrators (1974).

Finally, schools have been closed prior to the 1970s, for reasons other than to obtain general educational improvement. For example, in Cincinnati a total of twenty-one buildings have been closed in the post-World War II period because they were obsolete (Faust 1976:14). But of the many urban schools being closed today most are not being closed because of obsolescence, but due to enrollment decline.

VII. Enrollment Decline And School Closings in Large Cities

Colton and Frelich (1979:396) argue that available literature on school closings is based on studies of suburban and small-city schools which are

quite unlike "big city" schools. That is, demographic characteristics (especially a diversity of racial and ethnic groups) and high levels of bureaucratization make school-closing decisions very different in large districts as compared to smaller districts (i.e. probably much more difficult).

Colton and Frelich examined school closings in St. Louis between 1968 (when enrollment peaked) and 1977 to develop a better understanding of the school-closing process in large cities. In particular, they set out to discover if school officials (a) "base their school closing decisions upon efficiency criteria such as student-classroom ratios and unit cost of operation" and (b) "initiate comprehensive citizen participation and public information programs in order to secure at least minimal support for closing." They answer by arguing that neither the efficiency model nor the community involvement model has been evident in the school closure process in St. Louis.

According to Colton and Frelich (1979:400) two aspects of urban demography—rapid neighborhood succession in some areas and gradual student attrition in others—combined with racial politics (i.e. demands for affirmative school desegregation practices by some groups and opposition to such practices by other groups) to produce severe policy problems for those responsible for public education in St. Louis. And the problems in St. Louis were generally representative of problems faced by other large, old, industrial cities of the Northeastern and North-Central United States.

Through their investigation, which focused on thirty-seven closed school buildings, Colton and Frelich (1979:403) discovered that branches (annexes) were much more likely to be closed than main site schools. Many of the branches had been rented. Of the eleven main site schools closed, all but three were built prior to 1900 (they counted as one-third of the board's 19th century schools). Two of the others were built prior to 1920. However, Colton and Frelich (1979:404) caution that "possibly age of the building is merely an artifact of neighborhood age and change." Nevertheless old buildings, which are expensive to operate and in some ways unsuitable for modern educational programs, seemed to be especially vulnerable to closing. The level of utilization in adjacent attendance areas also appeared linked to school closings, as many underutilized main site schools were kept open because there was no adjacent school which had space for additional pupils. As for the demographic perspective, Colton and Frelich (1979:404) found that all seven of the main sites closed before 1975 had predominantly black enrollments. This was somewhat surprising, claim Colton and Frelich, given that both the number and proportion of white students in the St. Louis public schools had been declining for decades. One explanation they put forth is that closing black schools permits reassignment to white schools, fostering desegregation. But the data, they add, indicate that students from closed black schools were assigned to other black schools. Colton and Frelich

(1979:405) also demonstrate that the socioeconomic character of schools was strongly related to closings (i.e. most of the main site schools had high Aid to Dependent Children proportions). Closed main site schools, therefore, tended to be old, small, underutilized, and located in neighborhoods serving clients who were poor and black. Schools in these neighborhoods were also relatively close together.

Colton and Frelich (1979:409) discovered an abundance of illustrations indicating the informality of the school closure process in St. Louis. Specifically, they found that responsibility is divided and information is ambiguous, which allows low-level individuals (principals, for example) to impinge on decisions made at the top.

School closings did not produce much income for the school board in rents, leases, or sales. But this is hardly surprising, suggest Colton and Frelich (1979:410), given the character of the neighborhoods in which most closings occur and the fact that the organizational structure kept financial considerations from playing more than a minor role in school closing decisions.

In summary, Colton and Frelich (1979:414) suggest that:

The school system's commitment to the neighborhood school policy and its corollary—student reassignment to contiguous schools—largely forestalled the conditions which otherwise might have given rise to demands for community participation. Where branches were closed, students were reassigned to main sites in the same attendance area. Main site closings occurred in neighborhoods of dubious viability and where students could be reassigned to adjacent schools. Stable neighborhoods were not threatened. The spectre of busing was not involved.

Avoiding community conflict does, however, have its costs (Colton and Frelich 1979:414):

Schools which are inefficient on economic or pedagogical grounds may be kept open simply because contiguous schools cannot receive their pupils. In addition, different social groups are differentially affected by school closing decisions. Because neighborhoods with relatively affluent residents tend to be less densely populated and have stable housing stocks, schools in these neighborhoods are less likely to be closed. These are the same neighborhoods which enroll most of the school system's white pupils.

Finally, Colton and Frelich (1979:415) indicate that:

The present arrangement provides clear short-run political advantages to the central administration (low conflict), to building administrators (space), to stable neighborhoods (continuation of the neighborhood school), and to those who oppose desegregation (reassignment to contiguous schools). Moreover, because of the way in which the closing situation is defined, its financial dimensions never come into focus.

Colton and Frelich manage to show, therefore, that demographic characteristics as well as high levels of bureaucratization are important determinants in the school closure process in St. Louis. They encourage

others, however, to investigate the appropriateness of this characterization to other large cities.

School Closings and Desegregation

The Colton and Frelich study of St. Louis is especially interesting in that it demonstrates how race-based politics, particularly concerns about desegregation, have entered the school closing issue. According to them:

Some voices argue that desegregation could be furthered by transporting blacks from overcrowded schools to underutilized (usually old) white schools. Others argue that new schools in abandoned neighborhoods could become sites for integrated programs. Still others assert that whites will not go to such neighborhoods and that blacks who have fled from them will not go either (Colton and Frelich 1979: 401).

Such, they argue, is the context for decisions about school closings in St. Louis.

An interesting context, indeed, since in the mid 1970s there was some optimism, even if guarded, that the selective closing of surplus school buildings had become a useful device for northern school districts to eliminate racially identifiable schools, whereas a decade earlier new school construction was one of the major mechanisms advocated for attaining city school desegregation. In an article entitled "City School Desegregation and the Creative Uses of Enrollment Decline," Joseph M. Cronin (1977:10) describes how a number of Illinois cities closed old, uneconomical, high-maintenance buildings, thus making possible a redistribution of students that resulted in an improved mix of black and white students in accordance with state law. Cronin cautioned, however, that:

The canons of fair play and the principles of racial justice demand that:

1. The community early and often be informed fully of enrollment trends and the need to close down certain facilities in the future on a racially just basis.
2. The schools closed be those with inferior educational facilities or expensive maintenance or rehabilitation costs.
3. The burden of closings be carried equally by families of both races, avoiding the injustice of black students bearing a disproportionate share of any dislocation or transportation required.

Cronin further argues that the creative use of school closings is only one technique for accomplishing school desegregation, but for the next few years all school closings in cities should be evaluated as to their positive or negative desegregation impacts.

The Neighborhood Impact of School Closings

Further complicating school closings in large urban areas is the increasingly troublesome question of what happens to a community when a

school closes (Educational Priorities Panel 5/80:1). Do families move out? Do small establishments dependent on business from the school close down? Do vacant school buildings attract arson and vandalism? What are the effects on property values? There is a serious absence of applied studies whose major objective is to develop techniques that will help policymakers find answers to these questions.

The Educational Priorities Panel (EPP 5/80) recently completed a series of six case studies in New York City to document the economic impact on a community of a school closing. EPP found it next to impossible to separate out the economic and social impact of school closings in neighborhoods where decline might have begun before the closing.

As a result, EPP developed a new focus for its case study analysis. Site visits also revealed to EPP (5/80:6) that "what appeared to be significant, in terms of impact on the neighborhood . . . was not the closing, but the use of the building." Specifically, EPP explored the physical, socioeconomic, and psychological impacts on neighborhoods with vacant schools and compared these with neighborhoods with surplus schools where alternate uses had been developed.

A 1970 study of military base closures provides additional justification for EPP's emphasis on the reuse of surplus schools rather than the closure. According to the study (Lynch 1970:232), once the decision to close a base is made, the community's best hope for recovery is to forget the past and concentrate on the future.

Usually the greatest impact of a facility closure, for example, a manufacturing plant or a military base, is the loss of employment for a community. This is not so clearly the case with a school closure, since school employees may be transferred to another school or may never have resided in the community where the school was closed. Consequently, a school closure is likely to have little or no effect on employment status in the community or neighborhood undergoing the closure. Because school closures do not likely result in major employment losses, there is similarly, likely to be little impact on housing supply and price unless property values go down because a school is no longer within "walking distance" of most housing in the community or the potentially empty and possibly vandalized building could depress property values. There is also likely to be little impact on business activity (retail sales). The impacts of a school closure are much more likely to be social, psychological, and even political rather than economic. This would certainly seem to be the case in the short run.

VIII. Conclusion: The Effects of School Closings that Need Investigation

Since it seems that the phenomenon of declining enrollment will most likely have a greater impact on education in the next decade than any other foreseeable trend, it makes considerable sense to direct attention to

to the negative as well as the positive aspects of school closings. The need for such study is even more necessary given the highly political nature of the school closure process.

Although economic and educational factors basically set the context in which school closure decisions are made, social and political considerations are no less important. In fact, they may even be more important.

Not all school districts suffer in the same way from declining enrollment and many only recently have become concerned about student shortages as opposed to overcrowding, but districts must have a plan for shrinkage which is respectful of the curricular management and planning problems of contracting organizations and which is cognizant of the organizational and environmental context of enrollment decline. Every effort has to be made to humanize as well as rationalize the school closure process.

One of the positive by-products of school closings is that they provide an opportunity for citizen participation in local education. Moreover, there is something to be learned from previous closings to accomplish consolidation, generally in small rural communities, and from closure of other governmental facilities like military bases, public hospitals, and post offices.

Much more study, however, needs to be directed towards determining what happens when a school closes, especially in large urban areas. In particular: What are the neighborhood impacts of school closings? Has desegregation been promoted by closing schools that are highly segregated?

There are a number of other questions about the short and long term effects of school closings which need to be examined. For instance Cuban (1979:390-392) asks:

- What are the instructional and organizational effects of an aging staff?
- Do teachers who are forced to shift schools benefit or suffer, insofar as classroom performance is concerned?
- Do budget cuts in programs improve the prime instructional mission of the school system?
- Does community conflict over shrinking enrollment lead to a reexamination of educational priorities?
- Have closed schools affected children positively or negatively, both or neither?

Some additional questions which need study include:

- What are the implications of declining enrollments on the school curriculum (Eisenberger 1977)?*
- How can retrenchment be used as an opportunity to institutionalize

*Not only are the number and quality of courses being affected, but what about content? Are students still learning about a world of plenty and expansion or have they started to read and talk about austerity and retrenchment?

a revised (more open) budgetary process in public education (Ber-
man and McLaughlin 1977)?

- What are the impacts of school closings on minorities and the poor (Dean 1981 and Valencia 1980)?
- Are there important differences in school closings at various educational levels—elementary, junior high, high school, and college (Peckenpaugh 1977 and Hosler and Weldy 1977)?
- Does declining enrollment force a reexamination of the traditional assumptions about the purpose of schooling (Powers 1979:15)?
- How can school systems be marketed to capture new students? In the case of urban schools these new students might include white and middle class pupils (Dumanoski 1979: 145).

The state and federal role in school closings needs to be studied further as well.* Specifically, should the state and federal governments establish guidelines for school closings; procedures for neighborhood or community-impact assessments of closings; and requirements for public participation?

In Massachusetts, a state senator has petitioned for legislation (Mass. Bill No. 4669, 1608, and 6089) which would require a neighborhood impact statement before an elementary school is closed. The introduction of this bill raises many questions, such as: Have any other states considered or adopted Neighborhood Impact Statements (NIS), which are required before a public school can be closed? Why should the bill or the law only apply to elementary schools? Have any NIS been prepared? Are there criteria specified for what should be included in a NIS as well as for who should prepare one? What difference would a NIS make in the decision-making process? And, how is the impact area defined? Dean (1981) is conducting a neighborhood impact assessment of school closings in New York City.

South Bronx, NY Representative Robert Garcia has introduced a bill entitled the Surplus Schools Act, H.R. 7646 or 2121 which would not be limited just to closed schools. Surplus space in partially used schools could be renovated for "community centers, senior citizens centers, day care centers, preschools, community colleges, vocational centers, or other educational or social service functions." The Department of Housing and Urban Development would provide grants to local jurisdictions which would cover 80 percent of the cost of renovations (Yates 1981).

*While school buildings are owned by the state and it is conceivable that the state could redistribute property in such a manner as to improve education in the state as a whole, i.e. give unused (generally superior) suburban school space and staff over to urban needs, the prospects seem highly unlikely given the very vocal public sentiment in this country about the desirability as well as the necessity of having local control over education. Similarly, the federal government is less likely to get involved, especially in this age of Reaganism, where as much central control over education as possible is being dismantled and funds for domestic and social programs cut back substantially.

The role of the courts in school closings is another area where there is a need for some clarification. White (1980:33) has written that the courts have determined that school closings in California need no public vote. And Valencia (1980) has discussed the ruling by a California court upholding the constitutionality of a school closure scheme in Santa Barbara despite plaintiff's assertions that the scheme is disproportionately discriminatory with regards to the Chicano community in Santa Barbara.

Although there is tremendous diversity across this nation, with numerous issues such as desegregation, tax reduction pressures, and legal requirements for budget limitations exacerbating problems arising from enrollment decline, it is becoming increasingly necessary for communities to deal with decline. In fact, other than debate about which school gets closed, the major debate in many places is no longer whether there is a need for school closings but who is to blame for declining population. In San Francisco, the city blames the schools for population loss, but the school district counters with charges of high taxes, increasing cost of housing and declining city services (Jessner 1979:115).*

The decline situation creates an environment in which managers are going to have to engage more seriously in long-range or anticipatory planning. A population which is increasingly older, has fewer children, and which has less and less faith in public schools has to be dealt with by school managers if public education is to survive, especially in older, decaying central cities, and continue to serve its historic role as "the ladder of upward and economic mobility."

Finally, if President Reagan's efforts are successful, it is quite likely that Americans are going to have to learn to live with fewer government services in general and at every level (local, state, and national). Therefore, the sooner the American society starts to understand and deal with retrenchment the better.

*On one hand, it is true that population has been declining because fewer children are being born. It is also true, however, that areas have likely stopped growing due to a cessation of in-migrants and an increasing flow of out-migrants, which, in part, has been stimulated by declines in public services, like education. There is then considerable confusion as well as hostility between governmental bodies and some citizenry regarding this issue of *blame* which is very costly and which needs to be dealt with in a serious manner.

REFERENCES

- American Association of School Administrators, Arlington, Virginia
1965 *School Administration in New Reorganized Districts*.
Washington, D.C.
- 1974 *Declining Enrollment: What to Do*. Arlington, Virginia.
- Anrig, Gregory R.
1963 "Sociological Factors Which Resist School Consolidations."
The Clearing House 38:161-164.
- Bell, Thomas O.
1967 School District Organization Project. Idaho School District
Organization Project. University of Idaho.
- Berman, Paul and McLaughlin, Milbrey W.
1977 *The Management of Decline: Problems, Opportunities, and
Research Questions*. Santa Monica, California: Rand Corporation.
- Bishop, Lloyd
1979 "Dealing with Declining Enrollments." *Education and Urban
Society* 11:285-295.
- Boyd, William L.
1979 "Introduction: The Changing Politics of Changing Com-
munities." *Education and Urban Society* 11:275-284 and "Educa-
tional Policy Making in Declining Suburban School Districts:
Some Preliminary Findings." *Education and Urban Society*
11:333-366.
- Burlingame, Martin
1979 "Declining Enrollments And Small Rural Cities and Districts:
An Exploratory Analysis." *Education and Urban Society*
11:313-332.
- California Commission on School District Organization
1964 *Problems of School District Reorganization in California*.
Sacramento, California.
- Choy, Susan P.
1979 *Organizational Domain Changes in Response to Budget
Reductions: New York City High Schools and the Fiscal Crisis*.
Ph.D. dissertation, Public Administration, New York University.

Colton, David and Frelich, Alan

1979 "Enrollment Decline and School Closings in a Large City." *Education and Urban Society* 11:396-417.

Cronin, Joseph M.

1977 "City School Desegregation and the Creative Uses of Enrollment Decline." *Integration and Education* 15:10-12.

Cuban, Larry

1979 "Shrinking Enrollments and Consolidation: Political and Organizational Impacts in Arlington, Virginia 1973-1978." *Education and Urban Society* 11:367-395.

Dean, Joenathan

1981 An Examination of Strategies for Assessing the Impacts of Public School Closings on Surrounding Neighborhoods: New York City as a Case Study. Research grant in progress, Political Science Department, Hunter College of the City University of New York.

The Impact of Cutback Planning and Management on the Poor and Minorities in New York City: The Case of Public Education. To be published.

Deeb, Norman

1967 "School Consolidation: A Case Study." *Bulletin of the Bureau of School Service* 40:1.

DeGood, K.C.

1968 The Myths of Reorganization. Columbus: Ohio University Press.

Dumanoski, Dianne

1979 *Lexington: Declining Enrollment in an Educational Boom Town. Rising Above Decline*. Boston: Institute for Responsive Education.

Educational Priorities Panel

1980 *When A School Is Closed*. . . . New York, New York.

Eisenberger, K. E.

1974 "Closing a School: Some Ways to Ease the Trauma." *School Management* 18:33-36.

1975 "How to Prepare for the Closing of a Neighborhood School." *American School Board Journal* 162:42-45.

1977 "Declining Enrollments: Implications for the Curriculum."

National Association of Secondary School Principals Bulletin
61:47-53.

Faust, John F.

1976 *The Social and Political Factors Affecting the Closing of Schools in a Period of Declining Enrollments in a Large Urban School System*. Ph.D. dissertation, Education Department, University of Cincinnati.

Fitzwater, Charles O.

1953 *Educational Change and Reorganized School Districts*. Washington, D.C.

Florio, D.H.

1976 *Declining Enrollment*. An NSBA Conference Report, Colorado Springs, Colorado, August 4-6, 1976.

Frederickson, John H.

1978 *Must Declining Enrollment Mean Closing Schools?* Annual Meeting of the National School Boards Association, Anaheim, California, April 1-4, 1978.

Glassberg, Andrew

1978 "Organizational Responses to Municipal Budget Decreases." *Public Administration Review* July/August:325-331.

Gordon, W. M. and Hughes, L. W.

1980 "Consider This Before Closing Schools." *The American School Board Journal* 167:31-33.

Hooker, C. P. and Mueller, V. D.

1969 *Equal Treatment to Equals: A New Structure for Public Schools in the Kansas City and St. Louis Metropolitan Areas*. Jefferson City, Missouri.

Hosler, Galen and Weldy, G. R.

1977 "How One District Is Closing a High School." *National Association of Secondary School Principals Bulletin* 61:35-46.

Iannaccone, L.

1979 "The Management of Decline: Implications for Our Knowledge in the Politics of Education." *Education and Urban Society* 11:418-430.

Illinois Office of Education

1975 *Report and Recommendations of the Illinois Task Force on Declining Enrollments*. Springfield.

James, Thomas O.

1977 "Camping Down The System." *School Busine.* 43.

Jessner, Jean

1979 "Closing Schools, Bay Area Style." In *Rising Above Decline*, edited by Betsy Wachtel and Brian Powers, pp. 95-128. Boston: Institute for Responsive Education

Levine, Charles H.

1978 "More on Cutback Management: Hard Questions for Hard Times." *Public Management Forum* March/April:179-182.

Lynch, John E.

1970 *Local Economic Development after Military Base Closures*. New York: Praeger.

Mark, J. H. and Anderson, B. D.

1979 "Changing Educational Costs over the Life Cycle of Public School Districts." *The Urban Review* 11:173-186.

McPherrin, M. J.

1979 *A Case Study of Declining Enrollment in a Large Suburban School District*. Ph.D. dissertation, Education Department, Northern Illinois University.

Merlo, Frank P.

1971 "Discarding an Old School Building." *School Management* 15.

Mullin, C.

1973 "School District Consolidation: Odds are 2 to 1 It'll Get You." *The American School Board Journal* 160.

National Center for Education Statistics

1978 *Projection of Education Statistics to 1986-87*. Washington, D.C.

National Committee for the Support of the Public School

1967 *The Reorganization of Local School Districts*. Washington, D.C.

National School Boards Association

1976 *Declining Enrollment, NSBA Research Report #1976-1*. Evanston, Illinois.

Neill, G. W.

1976 "Washington Report: NCES Confirms Predicted Decline in Enrollment." *Phi Delta Kappan* 57.

Pack, K. and Weiss, E. H.

1975 "And Specifically, How to Make Productive Use of All that Yawning Space." *The American School Board Journal*.

Peckenpaugh, Donald

1977 "What the Principal Must Consider." *National Association of Secondary School Principals Bulletin* 61:20-30.

Powers, Brian

1979 "Fitting Schools to Fewer Students." *Rising Above Decline*, edited by Betsy Wachtel and Brian Powers, pp. 1-18. Boston: Institute for Responsive Education.

Purdy, Ralph D.

1968 *Guidelines for School District Organization—The Great Plains School District Organization Project*. Lincoln: University of Nebraska Press.

Rogers, David

1968 *110 Livingston Street; Politics and Bureaucracy in the New York City Schools*. New York: Random House.

Sargent, C. G. and Handy, J.

1974 *Fewer Pupils/Surplus Space, A Report*. Educational Facilities Laboratory, Inc., New York.

Savitt, R. F.

1977 "Utilization of Surplus School Buildings." *National Association of Secondary School Principals Bulletin* 61:31-34.

Schmemmann, Serge

1981 "Rosedale School Dispute: The Parents Feel Abused." *The New York Times* 2/6/81:B1 and B3.

School Management

1969 "When the Problem is Too Few Students." November: 71-78.

State University of New York

1962 *Better Education Through School District Reorganization*. Albany, New York.

Stefonek, Tom

1979 *Effective Management in Contracting Public Organizations*.
Division for Management, Planning and Federal Services,
Wisconsin Department of Public Instruction, Bulletin number
0263.

Thomas, Donald

1980 "Administrative Leadership in School Closures." *National
Association of Secondary School Principals Bulletin* 64:21-26.

University of Minnesota

1968 *School District Organization for Missouri, A Plan to Provide
Equal Access to Educational Opportunity for All Children*.

Valencia, R. R.

1980 "The School Closure Issue and the Chicano Community."
The Urban Review 12:5-21.

Wachtel, B. and Powers, B.

1979 *Rising Above Decline*. Boston: The Institute for Responsive
Education.

White, Bill

1980 "Court: School Closings Need No Public Vote." *The
American School Board Journal* 167:33.

Wholeben, B. E.

1980 "How to Determine Which School to Close." *National
Association of Secondary School Principals Bulletin* 64:7-12.

Yates, Brian

1981 "An Alternative To School Closings." *Citizen Participation*
March/April.

Yeager, R. F.

1979 "Rationality and Retrenchment: The Use of a Computer
Simulation to Aid Decision Making in School Closings." *Educa-
tion and Urban Society* 11:296-312.